

# **Chemical Weapons Destruction at Blue Grass**

#### A Partnership for Safe Chemical Weapons Destruction

The Blue Grass Army Depot, located near Richmond, Ky., safeguards a ready supply of conventional munitions and provides chemical defense equipment and special operations support to the U.S. Department of Defense. The Blue Grass Chemical Activity, a tenant of the 15,000-acre depot, is responsible for the safekeeping of a portion of the nation's chemical weapons stockpile. Together the Army and the community surrounding the depot are working toward a committed partnership to support the safe destruction of the Blue Grass chemical weapons stockpile.

#### What are the chemical weapons?

The chemical weapons stockpile comprises 523 tons of blister agent in projectiles and nerve agent in projectiles and rockets. Contrary to popular belief, these chemicals are not gases. In their original form, they are actually liquids. When stored for a long period of time, they can become thick and sludge-like.

#### What is the Blue Grass Chemical Agent-Destruction Pilot Plant?

The plant will be a state-of-the-art, full-scale pilot facility designed to safely and efficiently neutralize the Blue Grass chemical weapons stockpile. In June 2003, a systems contract was awarded to Bechtel Parsons Blue Grass to design, construct, test, operate and ultimately close this facility.

#### How will the weapons be destroyed?

After a comprehensive evaluation process, on Feb. 3, 2003, the Department of Defense selected neutralization followed by supercritical water oxidation, or SCWO, as the method of destruction. During the neutralization process, munitions are disassembled using modified reverse assembly. After the agent and energetics are separated, they are chemically decomposed and neutralized by caustic or water hydrolysis. The resulting chemical compounds are known as "hydrolysates." The agent hydrolysate and the energetics hydrolysate are destroyed using SCWO units. The SCWO process subjects the hydrolysates to very high temperature and pressure, breaking them down into carbon dioxide, water and salts. Contaminated dunnage, which consists of materials such as the contaminated wooden pallets upon which the weapons are stored, and metal parts are thermally decontaminated in a metal parts treater. Uncontaminated dunnage is shipped off-site for disposal in permitted landfills. Water is recycled back into the pilot plant facility and reused as part of the destruction process. Gas effluents are treated, filtered and monitored.

## FOR MORE INFORMATION CONTACT:

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Blue Grass Army Depot Public Affairs (859) 779-6221

Blue Grass Chemical Activity Public Affairs (859) 779-6897

#### Who will destroy the weapons?

The destruction facility will be operated by the systems contractor, Bechtel Parsons Blue Grass. The Assembled Chemical Weapons Alternatives (ACWA) program is headquartered at Aberdeen Proving Ground, Md. and has responsibility for safely disposing of the Blue Grass stockpile. Many other organizations are working in partnership with ACWA to complete this mission successfully. Among these organizations are the Department of the Army, U.S. Army Chemical Materials Agency, Chemical Stockpile Emergency Preparedness Program, Kentucky Department for Environmental Protection, Kentucky Division of Emergency Management and the Madison County Emergency Management Agency.

#### How long will it take to destroy the weapons?

Bechtel Parsons Blue Grass is in the process of completing the design. Once this phase is complete, a schedule will be developed. Subsequent phases will include construction, systemization, pilot testing, operations and closure.

#### How will the environment be protected?

Protection of the unique environment surrounding the Blue Grass Army Depot is one of the project's top considerations. Therefore, the environmental permits for the facility are based on special environmental studies conducted locally. Additionally, during disposal activities, the environment will be monitored continually to ensure that operations are protective of the area. During the entire process, oversight will be provided by the U.S. Environmental Protection Agency and the Kentucky Department for Environmental Protection.

What will happen to the facility and depot once the weapons are gone? The areas of the facility that have come in contact with chemical agent will be decontaminated and the equipment dismantled in accordance with regulatory requirements. The disposition of the remainder of the facility has not yet been determined and will be negotiated among the Department of the Army, Commonwealth of Kentucky, ACWA and Blue Grass Army Depot. The depot will continue with its missions of supplying munitions, chemical defense equipment and Special Operations support to the Department of Defense.

### What is the Kentucky Chemical Demilitarization Citizens' Advisory Commission?

This commission, known as the CAC, is made up of nine members appointed by the governor of Kentucky. Seven are local citizens and two are representatives of state agencies that work closely with the chemical weapons destruction program. The purpose of this organization is to provide a link between the community and the Army. The members provide a local perspective to the Army so that the public is as actively involved as possible in the disposal program. Local citizens can receive meeting notices and minutes by mail or e-mail. For information on current issues the commission is considering, to learn the upcoming meeting schedule or to be added to the mailing list, please contact the CAC secretary at (859) 625-1528 or kycac@iclub.org.

#### What is the Chemical Destruction Community Advisory Board?

The Chemical Destruction Community Advisory Board, known as the CDCAB, is an independent sub-committee of the CAC, made up of a diverse group of community leaders who organized to represent the views and concerns of all sectors of the local community on issues regarding Kentucky's chemical weapons disposal program. With input from many interested parties, the board's primary objective is to share information with the community and provide input to government decision-makers.

As the chemical weapons destruction project moves forward, the issues addressed by the CAC and its CDCAB are as important as they are varied. Topics discussed range from economic development and sustainability to permitting and environmental considerations. By providing input from the community, the board plays a vital role in the ultimate decisions.

For information on the board, please contact the co-chairs, Madison County Judge-Executive Kent Clark, (859) 624-4700 and Craig Williams, (859) 986-7565.

#### How can I learn more?

The Blue Grass Chemical Stockpile Outreach Office provides the community with a one-stop information source for chemical weapons destruction at the Blue Grass Army Depot. It supports the program's commitment to public outreach and involvement. The depot's government public affairs staff provides guidance and oversees the office's local activities. The outreach office staff develops and provides information papers, brochures and exhibits on the chemical weapons destruction program, makes available technical documents and reports, and provides speakers to local groups and organizations to address a variety of program-related topics.

The outreach office serves a communication channel for the community to provide input to program-related issues.

Contact the outreach office staff at (859) 626-8944 or at bgoutreach@bah.com. You also are invited to visit the office at 1000 Commercial Drive, Suite 2, in Richmond. The office is open weekdays from 8 a.m. to 5 p.m. Additional office hours are available upon request.